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**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

**INFORMATION DISCLOSURE STATEMENT  
ACCORDING TO 37 C.F.R. §1.97(b)**

APPLICANT: Daniel Zamanillo Castanedo, et al.      DOCKET NO. P03,0588  
SERIAL NO.: 10/731,379      GROUP ART UNIT: 1632  
FILED: December 9, 2003      CONFIRMATION NO.: 4441  
INVENTION: "NON-HUMAN MUTANT MAMMALS DEFICIENT IN SIGMA  
RECEPTORS AND THEIR APPLICATIONS"

Commissioner for Patents  
PO Box 1450  
Alexandria, VA 22313-1450

Sir:

In accordance with the provisions of 37 C.F.R. §1.56 and the requirements of 37 C.F.R. §1.98, Applicant respectfully requests that a citation and examination of the references identified on the attached PTO 1449 form be made during the course of examination of the above-identified application for United States Patent.

The present Information Disclosure Statement is being filed according to 37 C.F.R. §1.97(b) and before the latter occurrence of:

- (1) three months from the filing date of a national application;
- (2) three months from the date of entry of the national stage as set forth in 37 C.F.R. 1.491 in an international application; or
- (3) the mailing date of a first Office Action on the merits.

**REMARKS**

The attached PTO 1449 form lists related art references for the above identified application. In accordance with 37 C.F.R. §1.98(a)(2)(ii), no copies of the U.S. patent documents are being supplied herewith, but will be provided upon request.


### EXPLANATION OF RELEVANCE

The relevance of references AE-AV was discussed in the Specification.

The filing of the present Information Disclosure Statement is not to be construed as a representation that a search has been made, and is not to be construed as an admission that the information cited in the present Information Disclosure Statement is, or is considered to be, material to patentability as defined in 37 C.F.R. §1.56(b).

The above citation of related art is not a representation that such art constitutes a complete or exhaustive listing of all pertinent related art, nor that it necessarily includes the closest or most relevant art. The aforementioned citation comprises a voluntary citation of related art of which applicant and his attorney are presently aware and is not intended to serve as a substitute for the Examiner's own search.

Submitted by,

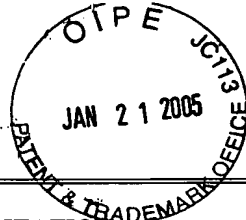
 (Reg. No. 45,877)

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### CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: Mail Stop Issue Fee, Commissioner for Patents, PO Box 1450, Alexandria, VA 22313-1450 on January 17, 2005.

  
Mark Bergner - Attorney for Applicants



Form PTO-1449 INFORMATION DISCLOSURE CITATION IN AN APPLICATION (use several sheets if necessary)					Docket No. <b>P03,0588</b>		Serial No. <b>10/731,379</b>	
					Applicant <b>Daniel Zamanillo Castanedo, et al.</b>			
					Filing Date <b>December 9, 2003</b>		Group Art Unit <b>1632</b>	
<b>U.S. PATENT DOCUMENTS</b>								
Examiner's Initials		Document Number	Date	Name	Class	Subclass	Filing Date If appropriate	
	AA							
	AB							
<b>FOREIGN PATENT DOCUMENTS</b>								
		Document Number	Date	Country	Class	Subclass	Translation	
							Yes	No
	AC							
	AD							
<b>OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)</b>								
	AE	Kaiser C., Pontecorvo M.J. & Mewshaw R.E. (1991) Sigma receptor ligands: function and activity. <i>Neurotransmissions</i> 7 (1): 1-5						
	AF	Walker J.M., Bowen W.D., Walker F.O., Matsumoto R.R., De Costa B. & Rice K.C. (1990) Sigma receptors: biology and function. <i>Pharmacological Reviews</i> 42 (4): 355-402						
	AG	Bowen W.D. (2000) Sigma receptors: recent advances and new clinical potentials. <i>Pharmaceutica Acta Helveticae</i> 74: 211-218						
	AH	Hanner M., Moebius F.F., Flandorfer A., Knaus H.G., Striessing J., Kempner E. & Glossmann H. (1996) Purification, molecular cloning, and expression of the mammalian Sigma-i binding site. <i>Proceedings of the National Academy of Sciences USA</i> 93: 8072-8077						
	AI	Kekuda R., Prasad P.D., Fei Y.-J., Leibach F.H. & Ganapathy V. (1996) Cloning and functional expression of the human type I Sigma receptor (hSigmaRI). <i>Biochemical and Biophysical Research Communications</i> 229: 553-558						
	AJ	Seth P., Leibach F.H. & Ganapathy V. (1997) Cloning and structural analysis of the cDNA and the gene encoding the murine type I sigma receptor. <i>Biochemical and Biophysical Research Communications</i> 241: 535-540						
	AK	Seth P., Fei Y.-J., Li H.-W., Huang W., Leibach F.-H. & Ganapathy V. (1998) Cloning and functional characterization of a receptor from rat brain. <i>Journal of Neurochemistry</i> 70: 922-931						
	AL	Prasad P.D., Hui W.L., Fei Y.-J., Ganapathy M.E., Fujita T., Plumley L.H., Yang-Feng T.-L., Leibach F.-H. & Ganapathy V. (1998) Exon-intron structure, analysis of promoter region, and chromosomal localization of the human Type I receptor gene. <i>Journal of Neurochemistry</i> 70: 443-451						
	AM	Crane MS (1999) Mutagenesis and cell transformation in cell culture. <i>Methods Cell Sci.</i> 21(4):245-253						
	AN	Earnest D.J., Liang F.Q., DiGiorgio S., Gallagher M., Harvey B., Earnest B., Seigel G. (1999) Establishment and characterization of adenoviral E1A immortalized cell lines derived from the rat suprachiasmatic nucleus. <i>J. Neurobiol.</i> Apr; 39(1):1-13						
	AO	Schwartz B., Vicart P., Delouis C., Paulin D. (1991) Mammalian cell lines can be established <i>in vitro</i> upon expression of the SV40 large T antigen driven by a promoter sequence derived from the human vimentin gene. <i>Biol. Cell.</i> 73(i):7-14						
	AP	Frederiksen K., Jat P.S., Valtz N., Levy D., McKay R. (1988) Immortalization of precursor cells from the mammalian CNS. <i>Neuron.</i> Aug; 1(6):439-448						
	AQ	Nagy A, Rossant J, Nagy R, Abramow-Newerly W, Roder JC (1993) Derivation of completely cell culture-derived mice from early-passage embryonic stem cells. <i>Proc Natl Acad Sci U S A</i> 90: 8424-8						
	AR	Kaestner KH, Montoliu L, Kern H, Thulke M & Schutz G (1994) "Universal $\beta$ -galactosidase cloning vectors for promoter analysis and gene targeting". <i>Gene</i> 148: 67-70						
	AS	Kaestner KH, Hiemisch H, Schutz G. Targeted disruption of the gene encoding hepatocyte nuclear factor 3 gamma results in reduced transcription of hepatocyte-specific genes. <i>Mol Cell Biol.</i> 1998 Jul; 18(7):4245-51						
	AT	Capecchi MR. The new mouse genetics: altering the genome by gene targeting. <i>Trends in Genetics</i> 1989 Mar; 5(3):70-6						
	AU	Tybulewicz VL, Crawford CE, Jackson PK, Bronson RT, Mulligan RC. Neonatal lethality and lymphopenia in mice with a homozygous disruption of the c-abl proto-oncogene. <i>Cell.</i> 1991 Jun 28; 65(7): 1153-63						
	AV	DeHaven-Hudkins D.L., Fleissner LC., Ford-Rice, F.Y. (1992) Characterization of the binding of [3H]-Pentazocine to sigma recognition sites in guinea pigs brain. <i>European Journal of Pharmacology</i> 227:371-378						
Examiner			Date Considered					
<b>*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.</b>								